

**Air Pollution Control
Title V Permit to Operate
Statement of Basis for Permit No. V-SU-0035-08.01
Minor Modification
August 2010**

**Red Cedar Gathering Company
Animas Compressor Station
Southern Ute Reservation
La Plata County, Colorado**

1. Description of Permit Changes

On June 7, 2010, the U.S. Environmental Protection Agency (EPA) received a letter from Red Cedar Gathering Company (Red Cedar) requesting a minor permit modification to address the replacement of an Onan CSG-6491-6005A generator engine (permitted unit G-101) with a Cummins GTA8.3-LC-G1 generator engine (Unit G-102) at the Animas Compressor Station (Animas). This engine replacement did not trigger any new applicable requirements at the facility. However, a minor permit modification was required because the replacement engine was not a replacement with the same make, model, and configuration as the existing engine, which would allow for the change to be made without a permit revision per Sections II.D. and III.Q. of the permit. Because this engine replacement increased the potential to emit (PTE) for nitrogen oxides (NO_x) above 100 tons per year (tpy), Animas is now classified as a major source for NO_x with respect to 40 CFR part 71 (part 71). Animas will continue to be classified as a major source of hazardous air pollutants (HAPs) and carbon monoxide (CO) emissions with respect to part 71, because the estimated PTE for formaldehyde (CH₂O) remains greater than 10 tpy and CO emissions still exceed 100 tpy. EPA has revised Table 1 in Section I.B. of the permit to reflect the make, model, serial number, and unit description of the replacement generator engine for unit G-101. The information for compressor engine units C-201 and C-202 was also updated to reflect changes resulting from engine replacements that qualified as off permit changes according to Section III.Q. of the permit.

In addition to the requested permit modification, EPA has also taken the opportunity to make some other necessary amendments to the permit while it was open. The PTE totals were removed from the description of operations in Section I.A. of the permit. Although the PTE totals were originally included in the permit for descriptive purposes only, EPA has decided to remove that language to avoid any misinterpretation that PTE is an enforceable permit requirement. The PTE for the facility will continue to be discussed in the Statement of Basis for each permit action. The PTE for other equipment located at the facility was updated with minor changes due to a reevaluation of emission calculations.

Additionally, EPA added text to Condition 3 of Section II.A. to accurately reflect the language in the applicable regulatory requirement [40 CFR 63.764(e)(1)]. EPA also corrected Condition 4 of Section III.J., by replacing the word “does” with “may” to accurately reflect the

language in the applicable regulatory requirement [40 CFR 71.7(e)(1)(vi)]. EPA revised Condition 7(d) in Section III.Q. by deleting the phrase “prior to installation of the replacement engine” for consistency with the applicable regulatory requirement [40 CFR 71.6(a)(12)(ii)].

These additional changes initiated by EPA do not alter any existing enforceable monitoring, recordkeeping, or reporting requirements of the permit; therefore, the changes qualify as administrative amendments, according to 40 CFR 71.7(d).

The following modifications have been made to this permit:

- Section I.A. Source Information
 1. PTE for the facility was removed from the permit. PTE will continue to be discussed in the Statement of Basis for each permit action. The PTE totals were updated to reflect the new replacement generator engine and updated component emission totals.
- Section I.B. Source Information
 1. Table 1 was updated to reflect the new information for the replaced generator engine, Unit G-101. The table was also updated to reflect new information for Units C-201 and C-202, resulting from engine replacements that qualified as off-permit changes.
- Section II.A. General Recordkeeping Requirements
 1. Corrected text in Condition 3 to accurately reflect the language in the applicable regulatory requirement.
- Section III.J. Group Processing of Minor Permit Modifications
 1. Corrected text in Condition 4 to accurately reflect the applicable regulatory language.
- Section III.Q. Off Permit Changes
 1. Corrected text in Condition 7(d) for consistency with the applicable regulatory requirement.

In accordance with the requirements of permit Section III.I. and 40 CFR 71.7(e)(1), EPA is making these revisions as a minor modification to the permit. The permit will be reissued as permit number V-SU-0035-08.01.

For applicability information regarding the part 71 permit for this facility that is not discussed in this Statement of Basis, please see the Statement of Basis for permit number V-SU-0035-08.00.

2. Facility Information

a. Location

The Animas Compressor Station, owned and operated by Red Cedar Gathering Company, is located within the exterior boundaries of the Southern Ute Indian Reservation, in the southwestern part of the State of Colorado. Animas is located in Section 1 of Township 33 North, Range 10 West, in La Plata County, Colorado. The mailing address is:

Red Cedar Gathering Company
125 Mercado Street, Suite 201
Durango, CO 81301

b. Contacts

Facility Contact:

Ethan W. Hinkley, Environmental Compliance Specialist
Red Cedar Gathering Company
125 Mercado Street, Suite 201
Durango, CO 81301
970-764-6910
970-382-0462 (fax)

Responsible Official:

Albert J. Brown, President and COO
Red Cedar Gathering Company
125 Mercado Street, Suite 201
Durango, CO 81301
970-764-6900
970-382-0462 (fax)

The Tribal Contact:

Brenda Jarrell, Air Quality Program Manager
Southern Ute Indian Tribe
P.O. Box 737
Ignacio, Colorado 81137
970-563-4705

c. Description of operations

Animas is a coal bed methane gas production field facility. The facility performs natural gas compression and dehydration, and has four lean burn natural gas-fired reciprocating internal combustion engine (RICE) driven compressors. The facility also operates a natural gas-fired generator engine. Other emission sources at the facility are insignificant.

The facility has no storage tanks with the potential for flash emissions. The facility does not remove carbon dioxide, extract natural gas liquids (NGLs) from field gas or fractionate mixed NGLs to natural gas products.

Animas is a major source for CO and NO_x with respect to part 71 operating permit requirements. The facility is also major for emissions of HAPs, emitting greater than 10 tpy of CH₂O.

d. List of all units and emission-generating activities

Red Cedar provided the information shown in Tables 1 and 2 below in the part 71 renewal application, minor modification application, and off permit changes notifications. Table 1 lists emission units and emission generating activities, including any air pollution control devices. Emission units identified as “insignificant” emitting units (IEUs) are listed separately in Table 2.

Table 1 - Emission Units
Red Cedar Gathering Company, Animas Compressor Station

Emission Unit ID	Description	Control Equipment
	1,401 site-rated bhp, Waukesha L7042GL compressor engines, lean burn, natural gas fired:	None
C-201	serial no. C-12215/1 Installed 11/8/2006*	
C-202	serial no. C-11530/1 Installed 9/18/2005*	
C-203	serial no. 346849A Installed 3/14/07*	
C-204	serial no. C-13406/1 Installed 6/2/2002*	
	165 bhp, Cummins GTA8.3-LC-G1 rich-burn, natural gas fired generator	None
G-102	serial no. 46397106 Installed 06/2010*	

*Determinations for applicability to New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) are included in Section 4.a. of this Statement of Basis

Part 71 allows sources to separately list in the permit application units or activities that qualify as “insignificant” based on potential emissions below 2 tpy for all regulated pollutants that are not listed as HAPs under section 112(b) and below 1,000 lbs/year or the de minimis level established under section 112(g), whichever is lower, for HAPs. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement. Units that qualify as “insignificant” for the purposes of the part 71 application are in no way exempt from applicable requirements or any requirements of the part 71 permit.

Red Cedar stated in its part 71 permit renewal application, submitted in October of 2007, that the emission units in Table 2, below, are IEUs. The application provided emission calculations for the tanks using TANKS 4.0, for the glycol dehydrators using GRI-GlyCalc Version 3.0, and for the heaters using AP-42 emission factors. This supporting data justifies the source’s claim that these units qualify as IEUs.

**Table 2 -- Insignificant Emission Units
Red Cedar Gathering Company, Animas Compressor Station**

Emission Unit ID	Description
H-101	1 catalytic heater, 12,000 Btu/hr
H-401, H-402	2 catalytic heaters, 18,000 Btu/hr each
H-501, H-502, H-508	3 tank heaters (TK-501, TK-502, TK-508), 325,000 Btu/hr each
TK-501	1 waste water tank, 500 bbl
TK-502	1 waste oil tank, 210 bbl
TK-503, TK-504	2 glycol still column vent tanks, 756 gallons each
TK-509	1 engine lube oil storage tank, 1,950 gallons, atmospheric vent
TK-505	1 TEG storage tank, 500 gallons
TK-506	1 lube oil storage tank, 1,600 gallons
TK-507	1 engine coolant storage tank, 1,000 gallons
TK-508	1 clean waster blowcase, 210 bbl
TK-610	1 TEG stock tank, 300 gallons
LAU-101	1 pig launcher, 12 inches
REC-101	1 pig receiver, 12 inches
X-301	1 TEG dehydrator/reboiler, 25 MMscfd/500,000 Btu/hr
X-302	1 TEG dehydrator/reboiler, 24 MMscfd/500,000 Btu/hr
NA	1 generator oil makeup tank, 15 gallons

e. Construction, permitting, and compliance history

Animas commenced operation on December 18, 2000. EPA issued an initial title V permit to operate for Animas on May 1, 2003. EPA administratively amended the initial permit three times, in August 2003, May 2006, and August 2007, respectively, amending non-enforceable facility contact information (names, addresses, phone numbers), changing permit format, and clarifying the language of certain applicable requirements. EPA has no record of any other federal air permitting activity at this facility. Consequently, there are no pre-construction Prevention of Significant Deterioration (PSD) or minor New Source Review (minor NSR) permits for this facility.

EPA conducted its first ever inspection of Animas on August 15, 2006. Based on EPA's records (The Enforcement & Compliance History Online (ECHO) database, located at: <http://www.epa-echo.gov>), Red Cedar is currently in compliance with all requirements at Animas. EPA received the part 71 renewal application on October 26, 2007 and issued the part 71 renewal title V permit on December 5, 2008.

On June 7, 2010, EPA received an application for a minor modification to address the replacement of the Onan CSG-6491-6005-A generator engine (Unit G-101) with a Cummins GTA8.3-LC-G1 generator engine. In addition to the requested minor permit modification, EPA removed the PTE for the facility from the description of operations in the permit. EPA also corrected the text of a condition in the facility-wide requirements section and administrative requirements section of the permit to accurately reflect the regulatory language of the applicable requirements.

Table 3 shows the construction and permitting history of Animas in the context of the history of potentially applicable CAA regulations, and includes the calculated PTE and relevant regulatory air pollutant emission status at each point in time.

**Table 3 – Construction, Permitting, and Compliance History
Red Cedar Animas Compressor Station**

August 7, 1980 → Prevention of Significant Deterioration Pre-Construction Permitting Program Promulgated (the 8/7/80 rules form the basis of the current regulations)
<p>Applicability:</p> <p>PSD is a preconstruction review requirement that applies to proposed projects that are sufficiently large (in terms of emissions) to be a “major” stationary source or “major” modification. Source size is defined in terms of “potential to emit,” which is its capability at maximum design capacity to emit a pollutant, except as constrained by federally and practically enforceable conditions. A new source or a modification to an existing minor source is major if the proposed project has the potential to emit any pollutant regulated under the CAA in amounts equal to or exceeding specified major source thresholds [100 tpy for the 28 listed industrial source categories and 250 tpy for all other sources].</p> <p>PSD also applies to modifications at existing major sources that cause a significant “net emissions increase” at that source. A modification is a physical change or change in the method of operation. Significance levels for each pollutant are defined in the PSD regulations at 40 CFR 52.21.</p> <p>Compliance: No new source or modification of a source subject to PSD review may be constructed without a permit.</p>
February 19, 1999 → Part 71 (Title V) Operating Permit Program Promulgated (the 2/19/99 rules form the basis of the current regulations)
<p>Applicability:</p> <p>Any major source (criteria pollutants > 100 tpy, or any single HAP > 10 tpy, or aggregated HAPS > 25 tpy);</p> <p>Any source, including an area source, subject to a standard, limitations, or other requirements under 111 or 112 of the CAA promulgated on or before July 21, 1992. Non-major sources subject to 111 or 112 CAA regulation promulgated after July 21, 1992 are subject unless the rule specifies otherwise;</p> <p>Any Acid Rain source;</p> <p>Any Solid Waste Incineration Unit.</p> <p>Application Due Date: Within 12 months after commencing operation.</p>

**June 17, 1999 → MACT HH for Major HAP Oil and Gas Production Sources Promulgated
(HAP > 10/25 tpy)**

For the purposes of the subpart, HAP PTE for an oil and gas production facility is determined by the facility-wide HAP emissions from dehydrators and storage vessels with a potential for flash emissions only.

Affected Sources:

- Glycol dehydration units
- Storage vessels with the potential for flash emissions
- Group of ancillary equipment (pumps, valves, flanges, etc...)
- Compressors intended to operate in volatile hazardous air pollutant service, located at natural gas processing plants

Final Compliance Dates

- Construction or reconstruction commenced before February 6, 1998 – June 17, 2002
- Construction or reconstruction commenced after February 6, 1998 – Upon startup or June 17, 2002, whichever date is later
- Area → Major HAP Source
 - Construction or reconstruction of the affected unit commenced before February 6, 1998, causing source to become major – 3 years after becoming major
 - Construction or reconstruction of the affected unit commenced after February 6, 1998, causing source to become major – Upon startup

Limited Requirements/Exemptions

- Actual average benzene emissions from glycol dehydrators < 1 tpy

Applicability to Source

Not Subject – At the time Animas commenced operations, the facility was an area source of HAP emissions (based on AP-42 emission factors)

December 18, 2000 – Operations Commenced

	PTE (tpy)				
	NOx	CO	VOC	HAPs	CH ₂ O
C-201, 1,342 bhp Waukesha L7402GL, 4SLB compressor engine (no controls)	19.4	35.0	6.5	3.1 ^a	2.3 ^a
C-202, 1,342 bhp Waukesha L7402GL, 4SLB compressor engine (no controls)	19.4	35.0	6.5	3.1 ^a	2.3 ^a
C-203, 1,342 bhp Waukesha L7402GL, 4SLB compressor engine (no controls)	19.4	35.0	6.5	3.1 ^a	2.3 ^a
C-204, 1,342 bhp Waukesha L7402GL, 4SLB compressor engine (no controls)	19.4	35.0	6.5	3.1 ^a	2.3 ^a
IEUs	0.5	0.2	0.04	0.01	0.0
Facility PTE for December 2000	78.1	140.2	26.0	12.4	9.2

PSD Status of Facility: Minor

HAP Status of Facility: Area (at this time)

HAP Status of Facility per Subpart HH: Area

Title V Status of Facility: Subject; #V-SU-0035-02.00

^aUsing AP-42 Emission Factors

Initial Permit Issued May 1, 2003

August 25, 2003 – Administrative Permit Amendment Issued - #V-SU-0035-02.01

No Addition of Emission Units or Change in Facility PTE or Emission Status

June 15, 2004 → MACT ZZZZ for Reciprocating Internal Combustion Engines (RICE) Promulgated

Affected Sources:

- Existing RICE ≥ 500 bhp, located at major sources of HAP emissions, constructed or reconstructed on or before 12/19/2002
- New/Reconstructed RICE ≥ 500 bhp, located at major sources of HAP emissions, constructed or reconstructed after 12/19/2002

Final Compliance Dates

- Existing lean burn RICE – Exempt
- Existing rich burn RICE – June 15, 2007
- New or reconstructed rich or lean burn RICE constructed on or before August 16, 2004
- New or reconstructed rich or lean burn RICE constructed after August 16, 2004 – upon startup

Applicability to Source

Not Subject – At the time of promulgation of this rule, Animas was an area source of HAP emissions.

May 22, 2006 – Administrative Permit Amendment Issued - #V-SU-0035-02.02**No Addition of Emission Units or Change in Facility PTE or Emission Status**

August 15, 2006 – First Ever EPA Inspection of Facility; EPA Re-calculated PTE for CH₂O for Engines Using Manufacturer-Specific Emission Factors (more accurate than AP-42 factors) → Results in Major HAP Status for CH₂O Emissions (>10 tpy) (essentially upon facility startup), but Does Not Trigger RICE MACT for Compressor Engines.

	PTE (tpy)				
	NO _x	CO	VOC	HAPs	CH ₂ O
C-201, 1,342 bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	19.4	35.0	6.5	4.6 ^b	3.8 ^b
C-202, 1,342 bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	19.4	35.0	6.5	4.6 ^b	3.8 ^b
C-203, 1,342 bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	19.4	35.0	6.5	4.6 ^b	3.8 ^b
C-204, 1,342 bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	19.4	35.0	6.5	4.6 ^b	3.8 ^b
IEUs	0.5	0.2	0.04	0.01	0.0
EPA Re-Evaluated Facility PTE	78.1	140.2	26.0	18.4	15.2

PSD Status of Facility: Minor

HAP Status of Facility: Major (40 CFR 63, subpart ZZZZ exempt)

HAP Status of Facility per Subpart HH: Area

Title V Status: Subject; #V-SU-0035-02.02

^b Updated emission factors used in CH₂O calculations based on manufacturer data

January 3, 2007 → MACT HH Amendments to Include Area Sources of Oil & Gas Production Facilities Promulgated (HAP < 10/25 tpy)**Affected Sources:**

Triethylene Glycol (TEG) dehydration units

Final Compliance Dates

Construction or reconstruction of the affected unit located in an Urban-1 county commenced before February 6, 1998:

Located w/i UA Plus Offset and UC boundary – January 4, 2010

Not Located w/i UA Plus Offset and UC boundary – January 5, 2009

Construction or reconstruction of the affected unit located in an Urban-1 county commenced on or after February 6, 1998 – Upon startup or January 3, 2007, whichever date is later.

Construction or reconstruction of the affected unit not located in an Urban-1 county commenced before July 8, 2005:

Located w/i UA Plus Offset and UC boundary – January 4, 2010

Not Located w/i UA Plus Offset and UC boundary – January 5, 2009

Limited Requirements/Exemptions

Actual average benzene emissions from glycol dehydrators < 1 tpy

Applicability to Source

Not Subject – Although Animas is an area source of HAPs as defined in subpart HH, the facility meets the exemption criteria for actual average benzene emissions from the glycol dehydrators < 1 tpy. However, Animas must comply with the recordkeeping requirements of this rule for exemption determination.

August 17, 2007 – Administrative Permit Amendment Issued - #V-SU-0035-02.03**No Addition of Emission Units or Change in Facility PTE or Emission Status**

October 26, 2007 – Part 71 Renewal Application Received - #V-SU-0035-08.00					
	PTE (tpy)				
	NO _x	CO	VOC	HAPs	CH ₂ O
C-201, 1,478 ^c bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	21.41	37.82	14.27	5.47	4.14
C-202, 1,478 ^c bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	21.41	37.82	14.27	5.47	4.14
C-203, 1,478 ^c bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	21.41	37.82	14.27	5.47	4.14
C-204, 1,478 ^c bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	21.41	37.82	14.27	5.47	4.14
G-101, 68.5 bhp, Onan CSG-6491-6005-A (no controls) – existing 4SRB RICE	9.86	1.45	2.05	0.10	0.07
IEUs	0.5	0.41	0.32	0.06	0.0
Facility Total PTE	96.0	153.1	59.5	22.0	16.6
<p>PSD Status of Facility: Minor HAP Status of Facility: Major (40 CFR 63, subpart ZZZZ exempt)</p> <p>HAP Status of Facility per Subpart HH: Area Title V Status: Subject; #V-SU-0035-08.00 Issued December 5, 2008</p> <p>^cRed Cedar reevaluated emissions based on the most recent manufacturer's data at maximum sea-level bhp rating (manufacturer emission factor, no derate for elevation).</p>					

January 18, 2008 → MACT ZZZZ Amendments Promulgated to Include:	
Area Sources (HAP < 25 tpy & for any size engine)	
Major Sources (HAP > 25 tpy & for engines ≤ 500 hp)	
<p>Affected Sources:</p> <p>New or reconstructed RICE of any hp at area sources of HAP emissions, constructed or reconstructed on or after 6/12/06</p> <p>New or reconstructed RICE ≤ 500 hp at major sources of HAP emissions, constructed or reconstructed on or after 6/12/06</p> <p>Final Compliance Dates</p> <p>Major HAP source</p> <p>Start up a new or reconstructed RICE ≤ 500 hp before January 18, 2008 – January 18, 2008</p> <p>Start up a new or reconstructed RICE ≤ 500 hp after January 18, 2008 – upon startup</p> <p>Area HAP source</p> <p>Start up a new or reconstructed RICE of any hp before January 18, 2008 – January 18, 2008</p> <p>Start up a new or reconstructed RICE of any hp after January 18, 2008 – upon startup</p> <p>Applicability to Source</p> <p><i>Not Subject – Although Animas is a major source of HAPs, the engines > 500 hp were constructed prior to 12/19/2002 and the engine ≤ 500 hp was constructed prior to 6/12/06.</i></p>	

January 18, 2008 → NSPS JJJJ for Spark Ignition (SI) Internal Combustion Engines (ICE) and Amendments to NESHAP for RICE Promulgated	
<p>Affected Sources:</p> <p>Stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.</p> <p>For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).</p> <p>Compliance Date – Upon startup</p> <p>Applicability to Source</p> <p><i>Not Subject – According to Red Cedar, none of the engines operating at the facility meet the manufacture dates applicable to this requirement.</i></p>	

February 17, 2010 – MACT ZZZZ Amendments Promulgated to Include:**Existing CI ICE at Area Sources (HAP < 10/25 tpy & for any size engine)****Existing CI ICE at Major Sources (HAP > 10/25 tpy & for engines ≤ 500 HP)****Revisions to Startup, Shutdown, & Malfunction Requirements for All RICE****Affected Sources (Additional to 2004 MACT ZZZZ Promulgation):**

Existing Stationary CI ICE of any hp at area sources of HAP emissions, constructed or reconstructed before June 12, 2006

Existing Stationary CI ICE ≤ 500 hp at major sources of HAP emissions, constructed or reconstructed before June 12, 2006

Existing Non-Emergency CI ICE > 500 hp at major sources of HAP emissions, constructed or reconstructed before December 19, 2002

Final Compliance Dates

Existing Stationary CI ICE of any hp at area sources of HAP emissions – May 3, 2013

Existing Stationary CI ICE ≤ 500 hp at major sources of HAP emissions – May 3, 2013

Existing Non-Emergency CI ICE > 500 hp at major sources of HAP emissions – May 3, 2013

Applicability to Source*Not Subject - According to Red Cedar, there are no CI ICE operating at the facility and the other engines are not subject to previous requirements of the rule.***June 7, 2010 – Minor Modification Application Received - #V-SU-0035-08.01**

	PTE (tpy)				
	NOx	CO	VOC	HAPs	CH ₂ O
C-201, 1,401 ^a site-rated bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	20.3	35.9	13.5	5.2	3.9
C-202, 1,401 ^a site-rated bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	20.3	35.9	13.5	5.2	3.9
C-203, 1,401 ^a site-rated bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	20.3	35.9	13.5	5.2	3.9
C-204, 1,401 ^a site-rated bhp Waukesha L7402GL, (no controls) – existing 4SLB RICE	20.3	35.9	13.5	5.2	3.9
G-102, 165 bhp Cummins GTA8.3-LC-G1, (no controls) – existing 4SRB RICE	27.4	1.1	2.3	0.3	0.2
IEUs	0.5	0.4	0.3	0.1	0.0
Source Re-Evaluated Facility Total PTE	109.1	145.1	56.6	21.2	15.8

PSD Status of Facility: Minor**HAP Status of Facility:** Major (40 CFR 63, subpart ZZZZ exempt)**HAP Status of Facility per Subpart HH:** Area**Title V Status:** Subject; #V-SU-0035-08.00^aRed Cedar reevaluated emissions based on the most recent manufacturer's site derate from 1,547hp of 2% for every 1,000 ft above 1,500 ft elevation, sited at 6,220 ft elevation.**f. Potential to emit**

Under 40 CFR 52.21, PTE is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation, or the effect it would have on emissions, is federally enforceable. Independently enforceable applicable requirements are considered enforceable to the extent that the source is in compliance with the standard. In addition, beneficial reductions in non-targeted pollutants resulting from compliance with an independently enforceable applicable requirement may be counted towards PTE provided the emission reduction of the non-targeted pollutant is enforceable as a practical matter. See the 1995 guidance memo signed by John Seitz, Director of OAQPS titled, "Options for Limiting Potential to Emit of a Stationary Source Under Section 112 and Title V of the Clean Air Act."

The PTE for Animas was listed by Red Cedar in Forms "GIS", "PTE", and the various forms "EMISS" of the part 71 operating permit minor modification application. Table 4 shows PTE data broken down by each individual emission unit, as well as the total facility-wide PTE.

**Table 4 - Potential to Emit
Red Cedar Gathering Company – Animas Compressor Station**

Emission Unit ID	Regulated Air Pollutants in tpy							
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	Total HAPs	CH ₂ O
C-201	20.3	13.5	0.0	0.4	35.9	0.0	5.2	3.9
C-202	20.3	13.5	0.0	0.4	35.9	0.0	5.2	3.9
C-203	20.3	13.5	0.0	0.4	35.9	0.0	5.2	3.9
C-204	20.3	13.5	0.0	0.4	35.9	0.0	5.2	3.9
G-102	27.4	2.3	0.0	0.1	1.1	0.0	0.3	0.2
IEUs	0.5	0.3	0.0	0.0	0.4	0.0	0.1	0.0
TOTAL	109.1	56.6	0.0	1.7	145.1	0.0	21.2	15.8

The PTE for the Animas Compressor Station is:

nitrogen oxides (NO_x) – 109.1 tpy
volatile organic compounds (VOC) – 56.6 tpy
lead - 0 tpy
total HAPs – 21.2 tpy

carbon monoxide (CO) – 145.1 tpy
small particulates (PM₁₀) – 1.7 tpy
sulfur dioxide (SO₂) – 0.0 tpy
largest single HAP (CH₂O) – 15.8 tpy

3. Tribe Information

a. Indian country

Red Cedar's Animas facility is located within the exterior boundaries of the Southern Ute Indian Reservation and is thus within Indian country as defined at 18 U.S.C. §1151. The Southern Ute Tribe does not have a federally-approved Clean Air Act (CAA) title V operating permits program nor does EPA's approval of the State of Colorado's title V program extend to Indian country. Thus, EPA is the appropriate governmental entity to issue the title V permit to this facility.

b. The reservation

The Southern Ute Indian Reservation is located in southwestern Colorado adjacent to the New Mexico boundary. Ignacio is the headquarters of the Southern Ute Tribe, and Durango is the closest major city, just 5 miles outside of the north boundary of the Reservation. Current information indicates that the population of the Tribe is about 1,450 people with approximately 410 tribal members living off the Reservation. In addition to Tribal members, there are over 30,000 non-Indians living within the exterior boundaries of the Southern Ute Reservation.

c. Tribal government

The Southern Ute Indian Tribe is governed by the Constitution of the Southern Ute Indian Tribe of the Southern Ute Indian Reservation, Colorado adopted on November 4, 1936 and subsequently amended and approved on October 1, 1975. The Southern Ute Indian Tribe is a federally recognized Tribe pursuant to Section 16 of the Indian Reorganization Act of June 18, 1934 (48 Stat.984), as amended by the Act of June 15, 1935 (49 Stat. 378). The governing body of the Southern Ute Indian Tribe is a seven member Tribal Council, with its members elected from the general membership of the Tribe through a yearly election process. Terms of the Tribal Council are three years and are staggered so in any given year 2 members are up for reelection. The Tribal Council officers consist of a Chairman, Vice-Chairman and Treasurer.

d. Local air quality

The Tribe maintains an air monitoring network consisting of two stations equipped to measure ambient concentrations of oxides of nitrogen (reporting the parameters NO, NO₂, and NO_x), ozone (O₃), CO, and PM_{2.5}, and to collect meteorological data. The AQS database has data from the Southern Ute Tribe for NO₂ and O₃ data at the Ignacio, Colorado station (AQS identification number 08-067-7001) and the Bondad, Colorado station (AQS identification number 08-067-7003) since 1990 and 1997, respectively. The CO channel at the Ignacio station has been reporting to AQS in 2004, and both stations began reporting NO and NO_x data to AQS in 2001. In 2000, both stations initiated meteorological monitors measuring wind speed, wind direction, vertical wind speed, outdoor temperature, relative humidity, solar radiation, and rain/snowmelt precipitation. Reporting of vertical wind speed data from both stations terminated on July 1, 2007. Particulate data (PM₁₀) was collected from December 1, 1981 to September 30, 2006 at the Ignacio station and from April 1, 1997 to September 30, 2006 at the Bondad station. Both stations began reporting PM_{2.5} in 2009. The Tribe reports hourly data to AQS for the criteria pollutants being monitored (NO₂, O₃, and CO), allowing AQS users to retrieve data that can be compared to any of the National Ambient Air Quality Standards for these pollutants.

4. Applicable Requirements

a. Analysis of applicable requirements

The following discussion addresses some of the regulations from the Code of Federal Regulations (CFR) at title 40. Note, that this discussion does not include the full spectrum of potentially applicable regulations and is not intended to represent official applicability determinations. These discussions are based on the information provided by Red Cedar in the part 71 renewal application and recent minor permit modification application and are only intended to present the information certified to be true and accurate by the Responsible Official of this facility.

Prevention of Significant Deterioration (PSD)

New major stationary sources of air pollution are required by the CAA to obtain an air pollution permit before commencing construction. A major stationary source is any source type

belonging to a list of 28 source categories which emits or has the potential to emit 100 tpy or more of any pollutant subject to regulation under the CAA or any other source type which emits or has the potential to emit such pollutants in amounts equal to or greater than 250 tpy.

Animas does not belong to any of the 28 source categories. Therefore, the potential to emit threshold for determining PSD applicability for this newly constructed source was 250 tpy. Upon initial construction in 2000, the Animas application indicated that the potential emissions of any pollutant regulated under the CAA (not including pollutants listed under section 112) were below the major source PSD thresholds; therefore, this facility was not required to obtain a PSD permit at that time.

The re-evaluated PTE of the four compressor engines as a result of the August 15, 2006 EPA inspection increased the uncontrolled potential emissions at the facility, but not above the major source PSD threshold of 250 tpy for criteria pollutants. Therefore, Animas remained a minor source with respect to the PSD regulations. Additionally, the increase in NO_x resulting from the replacement generator engine in this minor modification did not trigger PSD regulations either. See the discussion on PTE in Section 1.f. of this Statement of Basis.

New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart A: General Provisions. This subpart applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication of any standard in part 60. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 60.

As explained below, Animas is not subject to any specific subparts of part 60; therefore, the General Provisions of part 60 do not apply.

40CFR Part 60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule applies to steam generating units with a maximum design heat capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. 40 CFR part 60, Subpart Dc does not apply to Animas because according to Red Cedar there are no steam generating units with a maximum heat design capacity between 10 and 100 MMBtu/hr at the facility.

40 CFR Part 60, Subpart K: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. 40 CFR part 60, subpart K does not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

The subpart does not apply to the storage vessels at Animas because according to Red Cedar there are no tanks at this site that were constructed, reconstructed, or modified after June 11, 1973, and prior to May 19, 1978.

40 CFR Part 60, Subpart Ka: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to June 23, 1984. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. Subpart Ka does not apply to petroleum storage vessels with a capacity of less than 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer.

The subpart does not apply to the storage vessels at Animas because according to Red Cedar there are no tanks at this site that were constructed, reconstructed, or modified after May 18, 1978, and prior to June 23, 1984.

40 CFR Part 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This rule applies to storage vessels with a capacity greater than or equal to 75 cubic meters.

Although all storage tanks at Animas were constructed after July 23, 1984, the only tank that has a capacity greater than 75 cubic meters (TK-501, 500 bbl or ~79.5 cubic meters) stores waste water and trace amounts of condensate that are mechanically removed from the gas stream. The subpart specifically exempts vessels with a design capacity less than or equal to 1,589.874 cubic meters that store condensate prior to custody transfer [per §60.110(b)(d)(4)]; therefore, subpart Kb does not apply to Animas.

40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. This rule applies to stationary gas turbines, with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), that commenced construction, modification, or reconstruction after October 3, 1977.

According to Red Cedar, there are no stationary gas turbines located at Animas; therefore, this rule does not apply.

40 CFR Part 60, Subpart LLL: Standards of Performance for Onshore Natural Gas Processing; SO₂ Emissions. This rule applies to sweetening units and sulfur recovery units at onshore natural gas processing facilities. As defined in this subpart, sweetening units are process devices that separate hydrogen sulfide (H₂S) and carbon dioxide (CO₂) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H₂S and CO₂) removed by a sweetening unit.

There are no sweetening or sulfur recovery units at Animas; therefore, this rule does not apply.

40 CFR Part 60, Subpart KKK: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart establishes requirements for controlling fugitive VOC emissions from onshore natural gas processing plants.

Subpart KKK requires a source to comply with several requirements of 40 CFR 60, subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981 and on or Before November 7, 2006. Both subpart VV and subpart KKK regulate fugitive emissions of VOCs at onshore natural gas processing plants. The regulations for subpart VV are found at 40 CFR 60 §§60.480 through 60.489.

Natural Gas Processing Plant

Pursuant to the definitions at 40 CFR 60.631, a *natural gas processing plant* “means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.”

Natural Gas Liquids

Pursuant to the definitions at 40 CFR 60.631, *natural gas liquids* “means the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.” The use of “such as” in this definition indicates that this definition is inclusive of the listed hydrocarbons liquids but does not exclude all others. In fact, the definition of *natural gas liquids* found in Frick’s Petroleum Production Handbook, Vol. II states that NGLs are divided into more specific categories, including: (1) condensate; (2) natural gasoline; and (3) liquefied petroleum gases.

Process Unit

Process units are defined as equipment assembled for the extraction of NGLs from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

According to an April 7, 2009 memo from Cynthia J. Reynolds, Director of the Region 8 Technical Enforcement Program to Callie A. Videtich, Director of the Region 8 Air Program, titled Clarification of Applicability of 40 CFR 60, Subpart KKK to Dew Point and Joules Thompson Skids at Natural Gas Processing Operations, the use of dew point or Joules Thompson (JT) skids meet the definition of “Natural Gas Processing Plant.” As such, while compressor stations are typically not considered natural gas processing plants, the use of either a dew point or JT skid causes these facilities to meet the definition of natural gas processing plants and would thus be subject to the requirements of this rule.

Applicability and Designation of Affected Facilities

The provisions of this subpart apply to the following components at onshore natural gas processing plants that commenced construction, reconstruction, or modification after January 20, 1984:

- 1) Compressors in VOC service or wet gas service are subject to this rule. A compressor is in VOC service if it contains or contacts a process fluid that is at least 10% VOC by weight. In wet gas service means that a piece of equipment contains or contacts the field gas before the extraction step in the process.
- 2) All equipment except compressors within a process unit.

A compressor station, dehydration unit, sweetening unit, underground storage tank, field gas gathering system, or liquefied natural gas unit is covered by this subpart if it is located at an onshore natural gas processing plant. If the unit is not located at the plant site, then it is exempt from the provisions of this subpart.

Equipment

Equipment means each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by this subpart.

Subpart KKK establishes monitoring/testing requirements, recordkeeping requirements and reporting requirements for the following components that may be located at an onshore natural gas processing plant:

- Pumps in light liquid service
- Compressors in VOC service or wet gas service
- Pressure relief devices in gas vapor service
- Sampling connection systems
- Open-ended valves or lines
- Valves in gas / vapor or light liquid service
- Pumps and valves in heavy liquid service, pressure relieve devices in light or heavy liquid service, and flanges and other connectors
- Closed vent systems and control devices
- Vapor recovery systems
- Enclosed combustion devices
- Flares

In addition, the rule establishes separate requirements for the following:

- Delay of repair of equipment for which leaks have been detected;
- Alternative means of emissions limitation for components subject to the rule; and
- Determining components that are not in VOC or wet gas service.

Applicability to Animas

According to Red Cedar, Animas does not extract NGLs from field gas, nor does it fractionate mixed NGLs to natural gas products, and thus does not meet the definition of a natural gas processing plant under this subpart. Therefore, this rule does not apply.

40 CFR part 60, Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. This subpart establishes emission standards and compliance requirements for the control of emissions from stationary SI ICE that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).

Red Cedar provided the following information:

**Table 4 – NSPS Subpart JJJJ Applicability Determination
Red Cedar Animas Compressor Station**

Unit	Serial Number	Unit Description	Fuel	BHP	Manufacture Date / Commence Construction Date	Startup Date	Subpart JJJJ Trigger Date- Manufactured on or after
C-201	C-12214/1	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	12/1/1995	5/27/09	7/1/2007
C-202	C-11530/1	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	3/15/1995	1/21/09	7/1/2007
C-203	346849A	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	Pre-1994 / Pre-1998	6/14/2006	7/1/2007
C-204	C-13406/1	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	6/2/2002	9/20/2007	7/1/2007
G-102	46397106	Cummins GTA8.3-LC-G1 Generator Engine	Natural gas	165	7/2004	06/2010	7/1/2008

According to the information provided by Red Cedar, the requirements in subpart JJJJ do not apply to any of the engines operating at Animas, because they all commenced construction before June 12, 2006 and have not been reconstructed or modified since (as defined in §60.15) .

Should Red Cedar propose to install a replacement engine for C-201, C-202, C-203, C-204, or G-102 that is subject to subpart JJJJ, Red Cedar will not be allowed to use the off

permit changes provision, and will be required to submit a minor permit modification application to incorporate subpart JJJJ requirements into the permit.

National Emissions Standards for Hazardous Air Pollutants (NESHAP)

40 CFR Part 63, Subpart A: General Provisions. This subpart contains national emissions standards for HAPs that regulate specific categories of sources that emit one or more HAP regulated pollutants under the CAA. The general provisions under subpart A apply to sources that are subject the specific subparts of part 63.

Animas is subject to the general provisions under subpart A, as the facility emits at least one HAP regulated under the CAA and has equipment in relevant source categories (i.e., existing compressor engines C-201, C-202, C-203, and C-204 and electric generator G-201 in stationary RICE) which are not subject to relevant standards (i.e., 40 CFR part 63, subpart ZZZZ). A record of the applicability determinations demonstrating that these sources are not subject to the relevant part 63 standards must be kept in accordance with §63.1(b)(3). These applicability determinations must be kept on-site for a period of 5 years after the determinations or until a source changes its operations to become an affected source. Since EPA approved Red Cedar's request for a waiver of the on-site recordkeeping requirements per §63.10(f), EPA allows these records to be kept at Red Cedar's corporate headquarters in Durango, Colorado.

40 CFR part 63, Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. This subpart applies to the owners and operators of affected units located at natural gas production facilities that are major sources of HAPs, and that process, upgrade, or store natural gas prior to the point of custody transfer, or that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. The affected units are glycol dehydration units, storage vessels with the potential for flash emissions, and the group of ancillary equipment, and compressors intended to operate in volatile hazardous air pollutant service, which are located at natural gas processing plants.

Throughput Exemption

Those sources whose maximum natural gas throughput, as appropriately calculated in §63.760(a)(1)(i) through (a)(1)(iii), is less than 18,400 standard cubic meters per day are exempt from the requirements of this subpart.

Source Aggregation

Major source, as used in this subpart, has the same meaning as in §63.2, except that:

- 1) Emissions from any oil and gas production well with its associated equipment and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units.

- 2) Emissions from processes, operations, or equipment that are not part of the same facility shall not be aggregated.
- 3) For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage tanks with flash emission potential shall be aggregated for a major source determination.

Facility

For the purpose of a major source determination, facility means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in subpart HH. Examples of facilities in the oil and natural gas production category include, but are not limited to: well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Production Field Facility

Production field facilities are those located prior to the point of custody transfer. The definition of custody transfer (40 CFR 63.761) means the point of transfer after the processing/treating in the producing operation, except for the case of a natural gas processing plant, in which case the point of custody transfer is the inlet to the plant.

Natural Gas Processing Plant

A natural gas processing plant is defined in 40 CFR 63.761 as any processing site engaged in the extraction of NGLs from field gas, or the fractionation of mixed NGLs to natural gas products, or a combination of both. A treating plant or gas plant that does not engage in these activities is considered to be a production field facility.

Major Source Determination for Production Field Facilities

The definition of major source in this subpart (at 40 CFR 63.761) states, in part, that only emissions from the dehydration units and storage vessels with a potential for flash emissions at production field facilities shall be aggregated when comparing to the major source thresholds.

For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated.

Area Source Applicability

40 CFR part 63, subpart HH applies also to area sources of HAPs. An area source is a HAP source whose total HAP emissions are less than 10 tpy of any single HAP or 25 tpy for all HAPs in aggregate. This subpart requires different emission reduction requirements for glycol dehydration units found at oil and gas production facilities based on their geographical location.

Units located in densely populated areas (determined by the Bureau of Census) and known as urbanized areas with an added 2-mile offset and urban clusters of 10,000 people or more, are required to have emission controls. Units located outside these areas will be required to have the glycol recirculation pump rate optimized or operators can document that PTE of benzene is less than 1 tpy.

Applicability of subpart HH to the Animas Compressor Station

Animas does not engage in the extraction of NGLs and therefore is not considered a natural gas processing plant. Hence, the point of custody transfer, as defined in subpart HH, occurs downstream of the station and the facility would therefore be considered a production field facility. For production field facilities, only emissions from the dehydration units and storage vessels with a potential for flash emissions are to be aggregated to determine major source status. The facility does not have flash tanks and the HAP emissions from the dehydration units alone at the facility are below the major source thresholds of 10 tpy of a single HAP and 25 tpy of aggregated HAPs.

With respect to the area source requirements of this subpart, the facility is located outside both an urban area and an urban cluster. There are no tanks that have the potential for flash emissions at the facility. Furthermore, uncontrolled benzene emissions from the TEG glycol dehydrators, units X-301 and X-302, at the facility have been determined to be less than 1 tpy using GRI-GLYCalc Version 4.0, as presented in the supporting documentation in the application. **As a result, units X-301 and X-302 at the facility are exempt from the §63.764(d) general requirements for area sources per §63.764(e)(1)(ii). However, the following general recordkeeping requirement will continue to apply to this facility:**

- §63.774(d)(1) – retain the GRI-GLYCalc determinations used to demonstrate that actual average benzene emissions are below 1 tpy.

As explained previously, EPA has approved Red Cedar's request to waive the part 63 on-site recordkeeping requirement per §63.10(f) and allows Red Cedar to keep the records at their corporate headquarters in Durango, Colorado.

40 CFR Part 63, Subpart HHH: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This rule applies to natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user, and that are a major source of HAP emissions. Natural gas transmission means the pipelines used for long distance transport, and storage vessel is a tank or other vessel designed to contain an accumulation of crude oil, condensate, intermediate hydrocarbon, liquids, produced water or other liquid, and is constructed of wood, concrete, steel or plastic structural support.

This subpart does not apply to Animas as the facility is a natural gas production facility and not a natural gas transmission or storage facility.

40 CFR Part 63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This rule establishes national emission limitations and operating limitations for HAPs emitted from stationary spark ignition internal combustion engines (SI ICE) and stationary compression ignition internal combustion engines (CI ICE).

For the purposes of this standard, construction, or reconstruction is as defined in §63.2.

Rule History

June 15, 2004: SI and CI ICE > 500 bhp at Major HAP Source

This rule was originally promulgated in June 15, 2004 (69FR 33474). The original rule regulated all new and reconstructed lean burn and rich burn stationary SI ICE and CI ICE greater than 500 bhp located at major HAP sources. Only one category of existing ICE was subject to the rule at that time: Existing 4SRB SI ICE with a horsepower rating equal to or greater than 500 bhp.

For this version of the rule,

Existing means: Construction or reconstruction commenced on or before 12/19/2002.

New means: Construction or reconstruction commenced after 12/19/2002.

January 18, 2008: New SI & CI ICE at Area HAP Sources & New SI & CI ICE with Horsepower Rating < 500 bhp at Major HAP Sources

The first round of amendments to MACT ZZZZ were promulgated on January 18, 2008 (73FR 3568). Requirements were established for new SI & CI ICE of any horsepower rating located at area sources of HAPs and new SI & CI ICE with a horsepower rating less than or equal to 500 bhp at major sources of HAPs.

For this version of the rule:

Existing means: Construction or reconstruction commenced before 6/12/2006.

New means: Construction or reconstruction commenced on or after 6/12/2006.

February 17, 2010: Existing Compression Ignition Engines (CI ICE) at Area & Major HAP Sources

The second round of amendments to MACT ZZZZ was promulgated on February 17, 2010. New requirements were established for existing CI ICE of any horsepower rating located at area sources of HAPs, existing CI ICE with a horsepower rating less than or equal to 500 bhp at major sources of HAPs, and existing non-emergency CI ICE with a horsepower rating greater than 500 bhp at major sources of HAPs.

For this version of the rule

Existing CI at Area Source any bhp = Construction or reconstruction commenced before 6/12/2006.

Existing CI at Major Source, bhp \leq 500 = Construction or reconstruction commenced before 6/12/2006.

Existing Non-Emergency CI at Major Source, bhp $>$ 500 = Construction or reconstruction commenced on or before 12/19/2002.

While engines identified above are subject to the final rule and its amendments (February 17, 2010, January 18, 2008, June 15, 2004), there are distinct requirements for each engine depending on their design, use, horsepower rating, fuel, and major or area HAP emission status.

Summary of Applicability to Engines at Major HAP Sources

**Table 5 – Summary of Applicability to Engines at Major HAP Sources
Red Cedar Gathering Company – Animas Compressor Station**

Major HAP Sources			
Engine Type	Horse Power Rating	New or Existing?	Trigger Date
SI ICE – All ¹	\geq 500 hp	New	On or After 12/19/2002
SI ICE - 4SRB	$>$ 500 hp	Existing	Before 12/19/2002
SI ICE – All ¹	\leq 500 hp	New	On or After 6/12/2006
CI ICE - All ²	\geq 500 hp	New	On or After 12/19/2002
CI ICE - Non Emergency	$>$ 500 hp	Existing	Before 12/19/2002
CI ICE - All ²	\leq 500 hp	New	On or After 6/12/2006
CI ICE - All ²	\leq 500 hp	Existing	Before 6/12/2006

1. All includes emergency ICE, limited use ICE, ICE that burn land fill gas, 4SLB, 2SLB, and 4SRB.

2. All includes emergency ICE and limited use ICE

Summary of Applicability to Engines at Area HAP Sources

**Table 6 – Summary of Applicability to Engines at Area HAP Sources
Red Cedar Gathering Company – Animas Compressor Station**

Area HAP Sources			
Engine Type	Horse Power Rating	New or Existing?	Trigger Date
SI ICE - All ¹	All hp	New	On or After 6/12/2006
CI ICE - All ²	All hp	New	On or After 6/12/2006
CI ICE - All ²	All hp	Existing	Before 6/12/2006

1. All includes emergency ICE, limited use ICE, ICE that burn land fill or digester gas, 4SLB, 2SLB, and 4SRB.

2. All includes emergency ICE and limited use ICE

Applicability of 40 CFR 63, subpart ZZZZ to the Animas Compressor Station

Red Cedar provided the following information:

**Table 7 - NESHAP Subpart ZZZZ Applicability Determination
Red Cedar Animas Compressor Station**

Unit	Serial Number	Unit Description	Fuel	BHP	Commenced Construction Reconstruction or Modification Date	Installation Date
C-201	C-12214/1	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	10/22/1992	11/8/2006
C-202	C-11530/1	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	6/1/1995	9/18/2005
C-203	346849A	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	Pre-12/19/2002	3/14/2007
C-204	C-13406/1	Waukesha L7042GL, 4SLB Compressor Engine	Natural gas	1,401	6/2/2002	3/14/2007
G-102	46397106	Cummins GTA8.3-LC-G1, 4SRB Generator Engine	Natural gas	165	7/2004	7/2010

According to the information provided by Red Cedar, although Animas is a major source of HAP emissions, Units C-201, C-202, C-203, and C-204 at the Animas Compressor Station are not subject to the major source requirements of this subpart because they commenced construction before December 19, 2002 and have not been reconstructed or modified since (as defined in §63.2).

Emission Unit G-102 is less than 500 hp and commenced construction prior to June 12, 2006. Therefore, this engine is not subject to the requirements of MACT ZZZZ.

Compliance Assurance Monitoring (CAM) Rule

40 CFR Part 64: Compliance Assurance Monitoring Provisions. According to 40 CFR 64.2(a), the CAM rule applies to each Pollutant Specific Emission Unit (PSEU) at a major source that is required to obtain a part 70 or part 71 permit if the unit satisfies all of the following criteria:

- 1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant other than an emissions limitation or standard that is exempt under §64.2(b)(1);

“§64.2(b)(1): Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards:

- (i) *Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act;*
- (ii) *Stratospheric ozone protection requirements under title VI of the Act;*
- (iii) *Acid Rain Program requirements pursuant to Sections 404, 405, 406, 407(a), 407(b) or 410 of the Act;*
- (iv) *Emissions limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions with a source or between sources;*
- (v) *An emissions cap that meets the requirements specified in §70.4(b)(12) or §71.6(a)(13)(iii) of this chapter;*
- (vi) *Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1.”*

“§64.1: Continuous compliance method means a method, specified by the applicable standard or an applicable permit condition, which:

- (1) Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and*
 - (2) Provides data either in units of the standard or correlated directly with the compliance limit.”*
- 2) The unit uses a control device to achieve compliance with any such limit or standard; and
 - 3) The unit has pre-control device emissions of the applicable regulated pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Since no PSEU at Animas is subject to an emission limitation or standard or uses an add-on control device to achieve compliance, Animas is not subject to CAM requirements. Additionally, there are no PSEUs at the facility that have pre-controlled emissions that exceed or equal 100% of major source thresholds.

Chemical Accident Prevention Program

40 CFR Part 68: Chemical Accident Prevention Provisions. Based on Red Cedar’s application, Animas does not meet the definition of a natural gas processing plant under 40 CFR part 68 and the exemption for determining a threshold quantity found at §68.115(b)(2)(iii) for naturally occurring hydrocarbon mixtures applies to this facility. Therefore, Animas is not subject to the requirement to develop and submit a risk management plan. However, Red Cedar has an ongoing responsibility to submit this plan IF a substance is listed that the total source has in quantities over the threshold amount or IF the total source ever increases the amount of any regulated substance above the threshold quantity.

Stratospheric Ozone and Climate Protection

40 CFR Part 82, Subpart F: Air Conditioning Units. Based on information provided in its application, Red Cedar does not currently use air conditioning units at Animas. However, should Red Cedar perform any maintenance, service, repair, or disposal of any equipment containing chlorofluorocarbons (CFCs), or contract with someone to do this work, Red Cedar would be required to comply with title VI of the CAA and submit an application for a modification to this title V permit.

40 CFR Part 82, Subpart H: Halon Fire Extinguishers. Based on information provided by Red Cedar, there are no halon fire extinguishers at Animas. However, should Red Cedar obtain any halon fire extinguishers, then it must comply with the standards of 40 CFR part 82, subpart H for halon emissions reduction, if it services, maintains, tests, repairs, or disposes of equipment that contains halons or uses such equipment during technician training. Specifically, Red Cedar would be required to comply with 40 CFR part 82 and submit an application for a modification to this title V permit.

Off Permit Changes and Alternative Operating Scenarios

In response to an earlier Red Cedar application request, language was included in the permit to allow off permit replacement of individual compressor engines with new or overhauled engines, provided that each replacement engine is the same make, model, horsepower rating, configuration, and with equivalent air emission controls and meeting the same applicable requirements, as the engine it replaces, and provided that the provisions in the Off Permit Changes section of the permit, specific to engine replacement, are satisfied. The primary purpose of the special provisions is to ensure the PSD and MACT permitting requirements are not circumvented by off permit changes. Related language is also included in the section on Alternative Operating Scenarios.

b. Conclusion

Since Animas is located in Indian country, the State of Colorado's implementation plan does not apply to this source. In addition, no tribal implementation plan (TIP) has been submitted and approved for the Southern Ute Tribe, and EPA has not promulgated a federal implementation plan (FIP) for the area of jurisdiction governing the Southern Ute Indian Reservation. Therefore, Animas is not subject to any implementation plan.

Based on the information provided in Red Cedar's applications for Animas, EPA has determined that the facility is subject only to those applicable federal CAA requirements discussed in 4.a. above.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These

programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Regional Offices will, as necessary and appropriate, promulgate FIPs that will establish federal requirements for sources in specific areas. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop TIPs for approval under the Tribal Authority Rule. EPA intends that its federal regulations created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

5. EPA Authority

a. General authority to issue part 71 permits

Title V of the CAA requires that EPA promulgate, administer, and enforce a federal operating permits program when a state does not submit an approvable program within the time frame set by title V or does not adequately administer and enforce its EPA-approved program. On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR 71 setting forth the procedures and terms under which the Agency would administer a federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or tribal agency has not developed an approved part 70 program. Unlike states, Indian tribes are not required to develop operating permits programs, though EPA encourages tribes to do so. See, e.g., Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA will administer and enforce a part 71 federal operating permits program for stationary sources until a tribe receives approval to administer their own operating permits programs.

6. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

7. Public Participation

a. Petition to reopen a permit for cause

Any interested person may petition EPA to reopen a permit for cause, and EPA may commence a permit reopening on its own initiative. EPA will only revise, revoke and reissue, or terminate a permit for the reasons specified in 40 CFR 71.7(f) or 71.6(a)(6)(i). All requests must

be in writing and must contain facts or reasons supporting the request. If EPA decides the request is not justified, it will send the requester a brief written response giving a reason for the decision. Denial of these requests is not subject to public notice, comment, or hearings. Denials can be informally appealed to the Environmental Appeals Board by a letter briefly setting forth the relevant facts.